Part **5** 

# Recommendations and Conclusions

#### Infrastructure

The infrastructure information filed with the Commission by both incumbent and competitive providers, and CATV providers, indicates that Wisconsin has significant investments in infrastructure. Further data in this report indicates that competition continues to expand as new technologies are added to the infrastructure in the state. The business turmoil of previous years has stabilized, and companies continue to make infrastructure investments although at a slower pace than previous years.

Although large urban areas have more competitive choices for customers, providers in both large urban areas and rural areas continue to add infrastructure upgrades and deploy new technologies to serve their customers. Rural companies, in particular, when compared to a national survey<sup>1</sup> of rural telecommunication companies, indicated Wisconsin was above average in deployment of DSL technologies.

## **Broadband Deployment**

Broadband deployment for both residential and business customers has increased significantly in 2002 when compared to the data reported in the year 2000 infrastructure report. This deployment continued into 2003 and 2004. Broadband services in Wisconsin are offered by ILECs, CLECs and CATV providers. While broadband technology does allow customers to access the internet at higher speeds, it also provides for voice, video, and data transmission packages that save customers money.

DSL deployment showed a significant increase with an estimated 72 percent of the switches at year-end 2002 equipped with DSL; this is up from an estimated 21 percent from the year 2000. VoIP technology, based on internet protocol, is in the initial stages of deployment in the state.

<sup>&</sup>lt;sup>1</sup> Reference NECA 2003 Access Market Survey at <a href="http://www.neca.org/source/NECA">http://www.neca.org/source/NECA</a> 155 1152.asp. The publication is titled "Fulfilling the Digital Dream."

## Reporting of Information

The data collected for ILECs is reliable and the majority of the infrastructure information is filed in a consistent and trackable format. Based on the staff evaluation, the data for competitive companies is under-reported. The reason for this may be the result of the difficulty in a "one size fits all" format for the Commission annual report that does not capture the differences in the type of technologies and infrastructure arrangements used by these companies. Commission staff will continue to review formats and effective means for monitoring and reporting infrastructure status and deployment for these and all providers in the state.

Fewer companies than in the past filed data confidentially when responding to the data request. For those companies that did file confidential data, aggregated data was used to mask the individual filings. Many providers believe that the areas they serve should be kept confidential. This request for confidentiality becomes problematic, particularly when trying to report on the areas that have competition and infrastructure in place.

Wireless and Cable TV companies are not covered under the Commission jurisdiction and any information the companies provide to the Commission is voluntary. This is also an issue for VoIP technology where the regulation of VoIP is still under debate. Because these companies do add to the infrastructure and competitive services offered to customers, some means for collecting the infrastructure data and service area data must be established. Collecting this data on a regular basis would provide for a more complete picture of infrastructure in the state and provide a basis for comparing growth from year to year.

It is becoming more difficult to present a true picture of infrastructure and the investments made as the Commission does not have authority to collect data from all entities providing service. CATV and wireless providers make significant investments in infrastructure that contribute to the overall capacity and growth of the communication systems in the state. Documentation of this infrastructure will benefit not only the consumers in the state, but will also provide information to assist in evaluating economic growth opportunities for business throughout the state.

#### Recommendations

The Commission makes a number of recommendations regarding the infrastructure reporting under the statute. These are listed and further explained below. The recommendations are:

- Eliminate a.-d. under Wis. Stat. § 196.196(5)(f)1.
- Eliminate e. under Wis. Stat. § 196.196(5)(f)1. in reference to ISDN deployment and replace with a generic technologies reporting requirement.
- Establish statutory authority under Wis. Stat. § 196.25 to allow the Commission to collect data from cable and wireless providers so that the legislature and public have relevant information.
- Provide the Commission with the ability to directly impose penalties on companies who do not respond, or do not respond completely, to Commission request for information.

### Wis. Stat. § 196.196(5)(f):

- 1. Before January 1, 1996, and biennially thereafter, the commission shall submit a report to the joint committee on information policy and technology describing the status of investments in advanced telecommunications infrastructure in this state. The report shall include information on the progress made in all of the following areas:
- a. Distance learning, including the number of schools and other educational institutions connected to distance learning networks.
- b. Interconnection of libraries, including the number of libraries with video conferencing and network access capabilities.
  - c. Access to health care.
- d. Education, health care and employment opportunities for the disabled and other persons in the home.
  - e. Integrated services digital network deployment.
- f. Other infrastructure investments identified by the Commission.

Act 496 established the infrastructure reporting requirement under Wis. Stat. § 196.195(5)(f) regarding the status of infrastructure in the state. It is recommended that items a.-d. of that statute be eliminated in reference to distance learning, interconnection of libraries access to health care and education, health care and employment opportunities for the disabled, and other persons in the home. Section 2 of this report went into specific detail regarding the elimination of these statute items. Infrastructure is in place throughout the state to provide the service outlined. It is often the cost of the service, not lack of infrastructure that appears to be the limiting factor for the use of telecommunication to provide services for distance learning, interconnection of libraries, access to health care, and service to persons

with disabilities.

Item e. concerns the specific reporting requirement on the ISDN. This technology is no longer a major item in the infrastructure deployment. Faster broadband type technologies have replaced the ISDN and therefore ISDN is no longer an indicator of the status of a company's infrastructure deployment. It may be reasonable to include time limits on statutory reporting requirements or to revise them periodically to allow the statute to adapt to the current market place situation.

To assist in the continued monitoring of infrastructure service and technology changes, companies should continue to report information to the Commission. Through annual reports and data requests, competitive companies should also be required to file information on service areas and service offerings as public information so that a complete picture of the competitive market place can be presented.

Further, the Commission recommends that statutory authority (see Wis. Stat. § 196.25) be provided to allow the Commission to collect data from cable and wireless providers so that the Legislature and public have relevant information covering all areas of the telecommunication industry.

The Commission should also have the ability to directly impose penalties, or other consequences, on companies that fail to respond to requests for data, or that file incomplete responses to annual reports and data requests.

The changes in communications technology are dynamic and it is important to maintain reporting and to track infrastructure additions and service deployment within the state. The Commission will continue work with companies under price regulation and alternative regulation to highlight infrastructure as a key element in current and future plans. In addition, the Commission will continue to collect and publish relevant data on deployment of infrastructure and new services offered in the state to provide legislators, local communities, and customers with information on the status of the marketplace and changes in technology that are taking place.